

# PROCELLA AUDIO *Procella P10, P15, P18 and P815* Active Loudspeaker Connection Guidelines

***“Thank you for purchasing a Procella Audio Active Loudspeaker!”***

All Procella amplifiers are High-Power, Switched-mode Class-D amplifiers. Like any digital amplifier, proper mains, grounding and signal interconnections are essential for correct operation, to avoid hum and buzz and to achieve the best possible signal to noise ratio.

- Always insure that the amplifier is connected to a properly grounded electrical outlet! A good and stable ground connection is essential for correct operation of the switch-mode amplifier and the DSP.
- A proper ground connection is also essential to avoid electrical shock hazard.
- The Procella Active Loudspeaker models utilize very high power amplifiers. Confirm that the power lines and circuits are dimensioned to handle the necessary load according to these guidelines:

<b>Model:</b>	<b>Recommended Minimum Load Rating:</b>	
P10 / P15	115V: 10A	230V: 6A
P18 / P815	115V: 20A	230V: 10A

- The power line should be free from disturbances caused by other electrical appliances such as motors, heaters and ovens, elevators, refrigerators or similar.
- All Procella active loudspeaker amplifiers have a professional balanced (XLR Female) input. For the best possible performance, it is strongly recommended that the amplifier be connected with a professional XLR-type, shielded 2-wire cable to a **balanced output** of the pre-amplifier.
- If the amplifier is connected to a pre-amplifier or processor with an **unbalanced output**, use a phono-to-XLR adaptor wired according to IEC 268-12 where pin 2 is signal and pins 1 and 3 are connected to the shell. (e.g. Neutrik NA2NMP) The adaptor should be connected at the pre-amplifier end and the cable to the amplifier should be a professional XLR-type, shielded 2-wire cable.
- To minimize ground-loops in an unbalanced connection, connect the Procella active loudspeaker amplifiers to the same outlet as the pre-amplifier or processor and run the signal cable in parallel with mains cable.



If hum or buzz is present in the system, despite following the above precautions, below are some steps to solve the most common issues:

- Confirm that all cables and connectors are in good shape and that there are no bad connections.
- If it is not possible to connect the Procella active loudspeaker amplifiers to the same wall outlet as the pre-amplifier, try different wall outlets for the amplifier. Preferably to an outlet on a different circuit.
- Modify the unbalanced to balanced adaptor (or make a separate adaptor) with a 10-100ohm resistor in series with pin 1.
- If nothing else helps, use a balancing transformer such as:
  - Lundahl Transformers model LL156X-PHF3MX
  - Jensen Transformers model ISO-MAX PI-1RX

Please contact your local Procella Audio dealer or Procella Audio directly should you have any further questions.

Email: [sound@procella-audio.com](mailto:sound@procella-audio.com), web site: [www.procella-audio.com](http://www.procella-audio.com).